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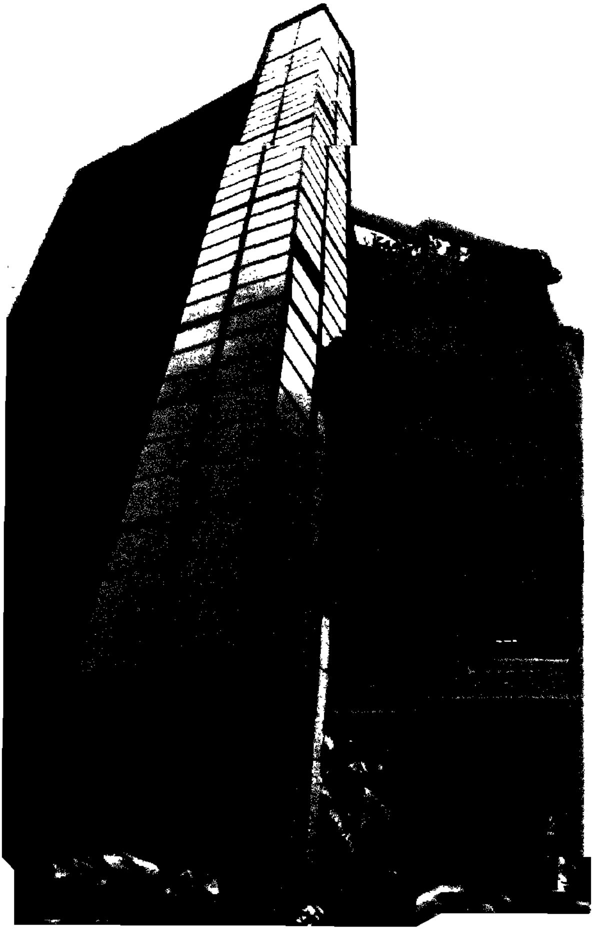

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—Convocation Address

Greetings from the President AIU

The Association of Indian Universities - one of the oldest and largest organizations of universities in the world - represents the collective voice of the higher educational institutions in India. Founded in 1925 as the Inter Universities Board and re-christened as the Association of Indian Universities in 1973, AIU has been the only effective forum for the centres of learning to interact among themselves, and between universities and opinion making and decision making agencies. In addition, it significantly contributed to enriching the academic, cultural and physical aspects of campus life and served as the data bank for the organized higher education sector.

Much has been achieved in the past 78 years; but much more needs to be done to ensure the safe and successful passage of Indian Universities through the century of globalization.

As I take over as the 79th President of the AIU, I am acutely conscious of the challenging prospects facing the academia in a fast changing world. One year is too short a time to make a difference; but I do believe that a beginning could be made - among other things - to facilitate the global marketing of Indian universities and institutions, to forge international linkages, to further raise the profile of the AIU, to enhance the sense of ownership by the member universities and to improve the health and well being of our academic and student communities. Several new initiatives have been begun by the Secretary General; it would be also my endeavour to strengthen his hands in all these efforts.

I also believe that the AIU should remain firmly committed to the young people in our universities and institutions. Their welfare, quality of their education and their future must be our overwhelming concern. We should do everything to safeguard their interests and protect them from the onslaughts of the unscrupulous and the fly by night operators - whichever garb they might happen to wear. Let us strive together to fulfill our obligations to the students and honour the trust reposed on us by the academia.

May I wish all of you a productive, creative and rewarding year, and a memorable 2004 for the AIU.

K. Mohandas

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Indian Legal Education: Some Reflections and New Dimensions

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The pattern of legal education, for a large country like India, gains special significance in view of its dedication to democratic norms and national development. Constitutional guarantees to the people of India and efforts to achieve socio -economic justice, distributive justice and equal opportunities during national progress and prosperity also calls for imparting proper legal education to meet the aspirations of the people. Impact of unprecedented industrialization, vital economic changes, scientific innovations, influence of urbanization and environmental issues are other vital factors which require due consideration to meet the challenges of societal change. Growing transition from traditional conservatism to the awakened reality of modernization and removal of conflicts between rural and urban environment of the society, require proper readjustment based on principles of rule of law and democratic norms. For all these national requirements new generation should be well-equipped with the tools of legal learning and training. Their creative legal acumen shall further enable them to meet the challenging change, in multiple directions, of the emerging Indian society. Let the legal educationists, social scientists, legal technocrats and all those devoted to the reform of the societal problems rise to the occasion to investigate, diagnose, and channelise their efforts to introduce necessary reforms in the temples of legal learning as well as in course and content of legal education so as to make it more effective in sharing the social responsibilities.

National Strains

India is also passing through a great turmoil in political, social, economic and educational fields. Efforts are being channelised to find out adequate course and content as well as human resource development to impart legal education. The indicators of the strains in the current period of crisis include the magnitude of the population growth, societal disorders, criminalisation of production and politics, interstate conflicts, uplift of the down-trodden and so on. Other indicators are tremendous rise in unemployed persons, staggering poverty, price-rise, all round inflation that is eating into the vitals of economy, spurious production of consumer goods, mismanagement in industries, etc. In this national context naturally the question arises what role legal education can play in helping the nation to tide over such crises? What should be the nature and relevance of the contents of law courses to impart training to this human element to improve the situation.

Social Responsibility and Legal Education

The question of social responsibility, is I believe, the Crux of a debate that will become crucial in the next few years. In what social context does the legal education operate today? To what extent legal education shall succeed in fulfilling new social activities? It will be pertinent to consider as to what exactly are the expectations of society from a Law Graduate under the dictates of the social responsibilities of business today, e.g. various matters concerning companies, business organization, factories, Government organizations and various other institutions? How far the modern Law Graduates can be useful for the modern companies and industrial organizations while considering the ideas of social responsibility and the legal education from practical utility point of view, it is quite possible that some satisfactory solution to many or some of the problems could be found by mutual exchange of ideas.

In the emerging Indian Society the role of Law Teachers and members of legal profession is also gradually changing. Apart from emphasis on specialization in profession the role of legal profession is significant in various socio-legal matters. In other words, while determining courses and contents of legal study it will be most appropriate to have a proper coordination between the Indian legal education and social requirements so that the "educated youth may vitally contribute while dealing with national issues

Institutional Environment

Institutional environment is an abbreviated form to express various factors intimately connected and influencing the imparting of legal education. In the first place, it is important that the law college should have sufficient and suitable place in its building for students. In South India there are independent Law Colleges while in North India–in Rajasthan, Madhya Pradesh and Uttar Pradesh, and Bihar in most of places, there are multi-departmental Government colleges and legal education is imparted in the Law Department of the college. In private colleges also the pattern is the same and Law teaching is done by a department of the college. There are very few independent Law Colleges. In some universities of North India, there are postgraduate Law Departments only, while LLB teaching is done by the colleges. However in Lucknow, Allahabad and Varanasi, apart from private colleges, LLB teaching is also done in the university Law departments. There should be separate Law Colleges for law teaching.

The Law Libraries have vitally contributed to the reputation of the University Law Departments, Law Colleges and Law Departments of the Colleges. It is the primary duty of the Deans and Principals of Law College to have a rich and up to-date library for law teachers and law students. The library should have sufficient standard foreign and Indian Text books on all subjects taught in various courses. Also the libraries should subscribe to various standard legal periodicals (both Indian and foreign). A Few years before, a survey of law libraries was conducted by the author and the survey results were very poor. Only a few university law departments and law colleges had library facilities but they were also lacking in availability of up to-date literature. Generally there was complaints of lack of financial grant for the purchase of books and periodicals for the libraries. It was really shocking to note that many law colleges and departments had either very poor library or no library at all. In fact, the universities should lay down library requirement as one of the essential conditions for granting recognition to institutions imparting legal education. It is now well established that the authorities of the institutions imparting legal education are responsible for maintaining good libraries for teachers and students. In the absence of proper law books, in the library and facilities for borrowing books the growing tendency among student is to prepare for examinations by studying small notes and guides published by book sellers with a view to have a good sale and earn profit. This unhealthy situation is having far reaching consequences and reflect ultimately on the knowledge of students and ultimately, the society suffers.

Service conditions of a law teacher also occupy an important place in the environment of the institution. With the security of the job the law teacher may devote his concentrated academic energy to the law teaching. Uncertainty or temporary basis of service of a law teacher will compel him to devote more time and energy to please the Administrative Head of the Institutions. An analysis of such a situation has revealed that mostly hard working and devoted legal scholars fail to compete with those who are only expert in flattery of the person in power in the institution. It should not be forgotten that by resorting to the tactics of super session, undue harassment and humiliation of the young law teachers, Heads of the Department are not only destroying the very purpose of legal education but doing great disservice to the country. Such pollution of institutional environment is bound to have adverse impact on the functioning of the devoted scholars as law teachers.

At this stage, it is also important to remind law teachers about their duties and responsibilities towards the institution and students. Let the law teachers develop habit of regular home study and keep their knowledge up to date by studying legal periodicals and Supreme Court decisions and thus thy will be in a position to solve student's academic problems. They also owe a social duty to publish Law Journals containing standard articles and vital contributions of brilliant scholars.

Professionalization of Law Teaching

While tracing the history of legal educational in India, one will find that as during British period so also after Independence for many years the members of the legal profession, namely, lawyers, were dominating the scene of legal education in India. Their approach was traditional and thinking had its own limitations as many hardly got spare time from their professional routine. The practising lawyers were entrusted with part time law teaching. In general the classes were conducted in the evening. Not only the teachers were part-timers but the students were also studying law only on part-time basis. It let to the general belief that legal education was important to those only who wished to join the legal profession at the courts and for all others it was useless. Only in rare universities of UPO whole time law teaching was conducted.

It was a coincidence that a new era of reform in legal education began with the enactment of the Advocates Act, 1961 It gave statutory recognition to the Bar Council of India, a professional organization to regulate the discipline of Advocates. The Act also empowered the Chairman of the Bar Council to constitute a separate body "Legal Education Committee" under the Bar Council. It consists of famous lawyers, Judges and eminent Law Teachers.

The formation of the 'Legal Education Committee' to prescribe courses for LL.B. Classes had a serious impact on the academic professionals as from 1961 onwards the LLB courses became subordinate to the Bar Council of India. Earlier Law Courses and contents were considered by the All India Law Teachers Association and the University Grants Commission (Law Courses Committee) but from 1961 practising Lawyers began to play important role in prescribing Law courses for LLB Teaching. General impression is that the Bar Council of India being the professional body will be the best forum to decide about the subject -matter of law teaching. It should not be forgotten that depending on the discretion of members of legal profession is a traditional approach as they considered that after LLB the qualified persons will join the legal profession. There is tremendous developmental change in the Indian Society and legal qualification is required while dealing with other multifarious, industrial and socio-economic activities of the society. The Bar Council has utterly failed in reorienting the lawyers to meet the challenges of the modern national main-stream.

So far as provision for the practical training under three year LLB degree course is concerned, on the basis of the survey it can be stated that the provision for practical training is completely a farce. Neither the National or State Bar Councils, nor the lawyers have taken any concrete step in collaboration with the teaching institutions and the courts in this respect. Time is ripe enough to give this provision special emphasis for those who are keen to be future lawyers.

There is a national trend towards professionalization in every field. So also this trend has vitally influenced the field of law teaching. Traditional control of practising lawyers over law teaching was gradually replaced by professional academicians. For this purpose Master's Degree of Law (LLM) is very well recognized as basic degree for appointment as law teacher. Law faculties of Indian universities are regularly conducting courses for LLM and PhD Degrees. Naturally the emphasis in these post-graduate Law Degrees is on academic perfection in various fields. Its result is that the old lawyers as law teachers are gradually retiring from the law teaching institutions and in their place well a qualified LLM or PhD Degree holders are being appointed as law teachers. This growth of professionalization in law teaching is a healthy development in the national interest.

It will be in the fitness of things to appreciate the contribution of some of talented law teachers who are making constant efforts to bring about vital reforms in socio-economic problems as well as suggesting legislative reforms in-spite of the various forces of resistance from vested interests. They deserve our congratulations. With the progress of professionalisation and advanced legal academic study and research it is expected that many more legal scholars shall come forward to suggest reforms to meet the challenges of the new developments.

Law Degree Period: Three or Five Years Course

Some Neo-reformists of legal education equated law with professional degrees like Medical and Engineering and therefore they emphasized on introduction of five year LLB courses. According to them basic entry point should be after intermediate. Proposed five years' period shall be divided into two years study with subjects of Social Sciences and later on three years for the study of legal subjects.

This subject was intensively discussed at the two conferences of the All India Law Teachers Association held at Bareilly in1984 and at Agra in 1987. At Agra conference, Shri H R Bhawradwaj, Minister of State for Law and Justice in his Inaugural address highlighted the futility or five year Courses. Subsequently a meeting of the delegation of the Law Teachers Association and Bar Council of India had a meeting with the Law Secretary and other concerned officials of the Law Ministry which took place in 1987 at Delhi. In this meeting also it was ultimately decided to continue existing pattern of Three Years Law Course for LLB Degree. Later on when it was brought to the notice of Law Ministry that at the instance of some enthusiastic Law Teachers, some Universities have already begun Five Years Course, it was then decided, to which Bar Council of India also agreed, that let there be entry at two stages i.e. after Intermediate for those who have already shifted to five years Course and for others only three years after graduation degree.

Present State of Legal Education

A survey of institutions imparting legal education, apart from the Law Departments of the Universities, reveals that during recent times there is mushroom growth of Five Year Law Teaching institutions. The Bar Council of India, under the Advocates Act, is empowered to form its legal Education Committee, which gives recognition to the private institutions imparting Five Year Law Degree Course. A survey also reveals that in some institutions various types of corrupt practices are being adopted to get recognition from the Bar Council of India. It also reflects on the nominal amount of salary paid to the teaching staff without caring to maintain UGC recognized pay scales to the Law Teachers of different categories. Management in such institutions prefers to appoint part-time Law teachers keeping in view financial aspect. This also deteriorates the standard of legal education in the name of professionalization of legal education. Students seeking admissions are required to pay huge amount of fees in various forms and categories. Most of such institutions have become 'Centres for money earning' by the management personnel. This is high time to introduce suitable reforms to remove existing corrupt practices in such private educational institutions imparting legal education. The Legal Education Committee of the Bar Council of India will have to be more vigilant in checking growth of monetary and academic corrupt practices in order to achieve the main objectives of the professionalization of legal education in India.

Apart from amazing low salaries (not maintaining UGC pay scales) to the teaching staff and preferring part-time teaching staff, private law college teaching (five years) institutions are mostly under-staffed and their appointments are made temporary and renewable in every next session of the college

Even the Law Library requirements are not maintained properly. In some institution very old and out of date editions of books in different subjects are purchased from booksellers at very law prices in order to fill up the small almirah of Law Libraries to mislead the inspection teams. Subscription to Legal Journals is also very poor. Often the private institutions are giving only false assurances for expediting the process of making good libraries and also for constructing separate buildings for Law Colleges. Such assurances with special hospitalities to the members of the Inspection Committee, are given at the time of inspection by the college managements The concepts of level, standards and quality of legal education is not given due importance by such management.

Students Legal Aid Clinics

"Free Legal Aid to the Poor" program has gained special importance as a part of existing five years law teaching in colleges. If properly implemented it is a significant step towards undertaking social welfare projects like Student's Legal Services Clinics. It is encouraging to cherish the hope, subject to checking corrupt practices, that in the due course of time our future Law teachers and students may be further inspired by a sense of fairplay and justice and thus they may play a significant role in sharing the social responsibilities properly.

Advanced Courses of Legal Studies

It is a matter of appreciation that most of the Law Faculties of Universities in India are imparting postgraduate specialized Law Courses. They include Diploma Courses as well as LLM in specialized branches of legal studies. UGC has also given details about such law courses in their Report on Legal Education. Apart from the aforesaid, recent emerging trend towards privatization, consumerism, globalization etc. have further added to the necessity of advanced legal studies in such specialized fields. The Human Resource Development, Ministry of the Government of India has also sanctioned money to some of the Universities to hold seminars on the "Intellectual Property Rights" in various parts of India. There is also suggestion to include this subject (in general) at LLB level courses. Apart from the aforesaid, many universities are providing opportunities to Indian legal scholars to do research work and prepare for Doctorate Degree in Law. This sort of specialized research in legal subjects provides an opportunity to legal scholars to examine and suggest reforms in the existing legislations in view of the judgments of the Supreme Court and emerging socio-legal developments in the Indian Society

Indian Constitution: Jurists and Judiciary

The framers of the Constitution of India realized the utmost importance of the Supreme Court being so constituted as to reflect the main currents of emerging legal thought and principles in the country and thus to vitally contribute to the difficult task of performing social responsibilities in the emerging Indian society. Under the Directive Principles of Policy, the Constitution of India provides for developing legal knowledge and awareness in the society so that the citizens may be better responsive to legal rights and duties as provided under various legislations and contribution of the Indian Judiciary. The emphasis is, therefore on wide range of legal education in India.

Under Article 124 (3) of the Constitution, the President of India is empowered to appoint a 'distinguished jurist' as Judge of the Supreme Court of India. This provision gave due recognition to the wide range of specialized learning of the eminent Professors of Law. It is really surprising and shocking that during the past fifty years, since the implementation of the provisions of the Constitution, not a single Professors of Law was appointed as Judge of the Supreme Court in-spite of existence of very eminent Professor of law in Indian Universities. In this respect if necessary the Constitutional provisions may also be amended to appoint 'distinguished jurist' at the High Court. (Sharma-1973).

The practice of appointing eminent 'jurists' to the highest court of the country has been followed in many democratic countries such as the United Sates, Australia and Canada, where the judicial system is in general akin to India's judicial system. A question arises: why has it not been so is India?

Justice Frankfurter/ (1939-1962) gained his greatest reputation as a Haward Law School Professor, Oliver W. Holmes (1902-1932) and Louis D. Brandies (1916-1939) also taught at Haward prior to this appointment in the Judiciary. Harlan F. Stone (1925-1941) was best known for his years as Dean of the Columbia Law School. William O. Douglas (1939 onwards) spent most of his pre-judicial career as a Law Professor first at Columbia and then at Yale. Chief Justice William H. Taft (1921-1930) was Dean of Cincinnati Law School prior to his election to the Presidency and a Professor of Law at Yale University, between his term as President and his appointment as Chief Justice. Abe Fortas (1965-1970) followed Taft and Douglas to become the third Yale Law School Professor to serve as a Justice of the US Supreme Court. Some of these examples are only illustratively and vitally contributed to the improvement of the general standard of the judgments in the Court.

In Canada, Bora Laskin, one-time Professor of Law at the University of Toronto Law School, has been one of the most outstanding Judges of the Supreme Court of Canada. Similarly in Australia, the appointment of Richard Blackburn in 1967 to the Supreme Court of the Northern Territory is a notable example. He was for a long time a Professor of law at the University of Adelaide Law School. WTV Windeyer (1958-1972) taught most illuminative about Australian Legal institutions at Sydney Law School, which vitally contributed to his appointment as a Judge of the High Court of Australia.

In view of the aforesaid, it would be a salutary development to appoint a 'distinguished jurist' to the

Supreme Court of India to promote a greater variety of creative judicial functioning while imparting justice.

Judicial Corruption

In view of judicial corruption cases which have come to limelight recently, it is essential to analyse the situation right from the mode of appointing Judges at the level of High Court. A lawyer, right from the beginning of his legal practice, is specially concerned about monetary aspect i.e. collecting fees from his clients. After ten years of goodwill of legal practice at the High Court, if he is appointed as Judge of the High Court, daily money earning will change into monthly salary. It takes some time to reconcile and adjust with new mode of payment. Sometimes 'habits of the present lie deep in the past'. Thus in the new situations and specially in the modern developing Indian Society, it becomes difficult for the newly appointed Judges to reconcile. On the other hand, a distinguished jurist (a Law Professor) may easily adjust himself in the new judicial environment as he is mostly concerned with acquiring highest standard of legal learning. This important factor also supports the contention of the appointment of Law Professors in the higher judiciary.

Conclusion and Suggestions

In view of the Tremendous changes and challenging consequences of the enactment of new legislations to meet the new requirements of the Indian Society, there is greater need to extend the legal education and training not only for practice before law Courts but also in other areas like business, administration, insurance, banking, transport, distribution, etc. in the public and private sectors.

The makers of Indian legal education have now greater social responsibility and they are under a social obligation to keep in view not only existing problems but also the future problems of law and society of the emerging India. In order to effectively implement Constitutional directives, democratic functioning of institutions and to achieve national and international objectives, it is obvious that major fundamental reforms should be introduced in the course, contents and methodology of imparting legal education. The main focus of the approach ought to be on producing legal scholars to meet the national requirements in specialized fields of legal education. The concepts of level, standards and quality embroidered with effectiveness, efficiency and accountability to society's progress and welfare, should be the main guidelines for proper legal education. There should be sufficient checks and balances on the functioning of the private institutions imparting legal education. This calls for a radical change in the very conceptual approach to legal education in India, its focus, contents and contours.

Apart from the aforesaid concluding remarks, some more suggestions are as follows:

i. Formation of National Council Legal Education (NCLE) is necessary in order to coordinate various legal requirements of multiple institutions of the society. It may consist of representatives of Eminent Legal Professors (UGC), Bar Council of India, Government Nominees (Ministry of Law), Private and Public Corporate Sector and other specialized organizations.

ii. Inspection Committees may be appointed by NCLE to visit private institutions imparting legal education to check academic standards, employment of Law Teachers and administrative functioning.

iii. UGC academic and salary grades should be effectively implemented for the Law Teachers in the private and public institutions imparting legal education.

iv. Necessary steps may be taken by the Government to appoint "Distinguished Jurists" (Law Professor) on the Bench of the Supreme Court under Article 124(3) of the Constitution. If necessary Constitution (Act 124(3) may be amended to empower the Government to appoint eminent Law Professors as Judges on the High Court.

v. Refresher Courses on special legal issues by UGC may be conducted by UGC through Law Faculties of the Universities in different parts of India. Law Teachers may be invited to participate and submit written papers towards the end of the Refresher Course.

vi. In specialized and current legal issues and topics national seminars and conferences may be organized with the special financial grants by UGC and the Government to reputed universities.

Reference

1. Sharma KM (1973) Appointment of Jurist on the Supreme Court", *Journal of the All India Law Teachers Association*, (pp. 1-8). ☐

Higher Education in a Liberalised Economy

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The Background

Let us begin with some statistics:

In Maharashtra, there are nine non-Agricultural Universities, four Agricultural Universities, one Open University, one Technical University, Ten Universities of Health Sciences and 11 Deemed Universities.

Some other interesting "numbers" are:

	India	**Maharashtra**
Number of Colleges	74000	12342*
Number of Students	80 lakhs	15.20 lakhs

* Includes 1525 Women's Colleges

The data about Business Schools and Engineering Colleges is as under:

	Business Schools	Engineering Colleges
Andhra Pradesh	63	145
Arunachal Pradesh	-	1
Assam	5	3
Bihar	4	6
Chandigarh	1	4
Chhatisgarh	3	11
Delhi	13	19
Goa	1	4
Gujarat	21	22
Haryana	15	29
Himachal Pradesh	3	2
Jammu & Kashmir	2	4
Jharkhand	2	5
Karnataka	33	77
Kerala	8	46
Madhya Pradesh	25	27
Maharashtra	93	161
Meghalaya	–	1
Manipur	1	–
Orissa	7	16
Pondicheny	4	4
Punjab	11	26
Rajasthan	22	9
Sikkim	–	1
Tamil Nadu	72	153
Tripura	–	1
Uttar Pradesh	50	61
Uttaranchal Pradesh	9	5
West Bengal	8	29
Non University	25	–
Total	501	872

(Source UGC Annual Reports 2000-2001)

Thus, we have a large number of Universities in the country. In the area of professional education, we have a large number of Business Schools and Engineering Colleges. However, some States have larger numbers, others have smaller numbers of educational institutions. The quality of education imparted through these institutions is not uniform across the country. It is doubtful how many of them measure up to International Standards!

During 2001-02, 1,54,168 American students went abroad for higher education; a negligible number came to India. During the same year, 68,000 Indians went to the United States for higher studies. In 2001-02, America had 5,83,000 foreign students (i.e. 4.3% of the total enrolments). These students brought in US $ 11.95 billion to the country. In the same year, about 2,00,000 foreign students brought in 4.2 billion Australian Dollars to Australia. As per the HRD Ministry, in 1998 about 34000 graduates and 30000 skilled technocrats migrated to the United States. Of this, nearly 75% would not return to India. (Source : Article captioned "New Directions of Higher Education" by Shri Bhushan Patwardhan in Loksatta, Pune - 411003 dated 13.6.2000)

Thus, in recent years, there has been a high degree of mobility of the students population across the globe. If India can provide quality education, there is no reason why foreign students cannot be attracted to this country to pursue higher education.

Higher Education in India

Higher Education in India has turned out to be a serious joke over the years. It has inherited too many problems. There is no dearth of solutions in the form of recommendations of several committees; however no problem is solved, while new ones continue to emerge.

We propose to look at some of the problems of higher education - particularly, "professional education". We shall concentrate on Management and Engineering education, trying to cover all areas would produce a large volume that could confuse and frustrate the reader. We need to understand thoroughly the problems discussed below and work towards resolving them satisfactorily.

Indifference of People

Parents and children choose to remain indifferent to the problems. They expect the "Government" to do things for them!. Occassionally, they do raise their voice - only when their own personal interests are affected. They do not think it necessary to form a powerful block to fight for their rights to have quality education at affordable cost and to violently oppose those forces that prevent quality education from being a reality.

Education, like infrastructure, constitutes the backbone of social and economic development. We cannot afford to compromise on the quality of education if we hope to achieve a higher degree of social and economic development. The education we provide must be affordable, so that students do not either go abroad for higher education of better quality or choose to be denied the benefit of higher education and get frustrated in life.

Excessive Controls in the System

Higher Education is grossly over-regulated and yet it is a poor performer. The subject is in the concurrent list in the Constitution of India. Both the Central and State Governments are concerned with education; but nothing seriously is being done! At the Centre we have the following bodies "regulating" Higher Education:

(a) The University Grants Commission is primarily concerned with funding higher education. It does issue guidelines on several aspects.

(b) The All India Council for Technical Education is supposed to regulate education in the field of engineering and technology, management, pharmacy, hotel and catering management, architecture and computer science.

(c) The Medical Council of India regulates medical education.

(d) The Bar Council regulates Legal Education.

On top of all this, we have the Association of Indian Universities!

At the State level, we have the State Department of Education, the Directorates of Higher Education, Technical Education and Medical Education and - of course -the Universities.

They all seem to do the same thing : regulate. For this purpose, they have created, at huge cost to the tax payers, huge administrative structures that add to the COST of education, but nothing to its QUALITY and VALUE. (Is this a method of providing "employment" and "a source of earning" alone?). Funds are provided by several of these agencies to "promote" education; The actual spending is "monitored" through a Chartered Accountants Certificate that the grant disbursed was utilised for the purpose for which it was sanctioned! There seems to be no way to assess whether the spending has produced any tangible output and whether the spending was at all required in the first place. Do we ever realise how much all this expenditure would contribute to the cost per student if we dare compute the figure using scientific costing principles? And let us add to this, the expenses incurred by the "administration" of our Universities and Colleges. We would then get a shock that the cost of education is pretty high as compared to the value the system delivers - on a comparison with world - wide norms.

All the "regulatory bodies" we have listed above issue "guidelines" which often contradict one another and, therefore, instead of providing "guidelines" they create "confusion". These bodies collect a lot of statistical and other data, but what comes out of this "collection" process is rarely known. Maybe a few voluminous reports containing facts which are too well - known and, therefore, the reports don't need to be read seriously! The head of an educational institution is busy "understanding" and "implementing" the "rules" and "guidelines" and in compiling the same or similar statistical data in a variety of formats. All this has to be done in addition to managing the time table, scheduling classrooms (which are often small and insufficient in number), dealing with parents with high expectations, a band of demotivated teachers and a bunch of students who really do not know why they entered the institution in the first place! A teacher who is elevated to the post of the head of the Institution supervises administrative (clerical) work and rarely finds time to teach or do serious research which the teaching profession demands of the teacher. Yet, the authorities want that he or she must have a Ph.D to be eligible for that position. And then the process of doing substandard research and producing an incomprehensible document called a thesis begins which, in turn, leads to the decline in the quality of research work done by even the best brains in the country! The authority do not seem to understand the relationship between "research" and "academic administration". What the Institution head needs is not a Ph.D but a thorough training in academic administration before he is elevated to the position.

What we really need today is a single regulatory body with regional state-level branches for each professional discipline. Let us follow the model of the professional bodies like the Chartered Accountants, the Cost Accountants and Company Secretaries which have been able to provide high quality of education and regulate the profession reasonably well They are accepted as "members" of international bodies like the International Federation of Accountants. And, as in the case of these bodies, no person working for the regulatory body should be an employee of the Government. Let the institutions which are "regulated" contribute to the running of these bodies through an annual fee computed on the basis of the students' strength and levy of an annual fees on those who have "qualified" in that discipline. May be the industry could make a contribution to the corpus. Others who are concerned about the quality of education might like to add to the funds. Let us remember that the quality of education can only be improved if governmental financing and "control" is eliminated!

Let us take away all professional and vocational courses from the University system, the system simply cannot manage them!.

Dependence on Law

If you look at the rules / regulations framed by these regulatory bodies, you would feel that the best legal brains put their heads together to create these documents. The rules are, generally, beyond the comprehension of the ordinary parents and students. To add to this, when there is a "dispute" about the "interpretation" of the rules, we go to the Courts asking them to tell us what the rules were supposed to mean! The number of decisions doled out by the High Courts and Supreme Court over the years is simply mind-boggling. And since the Courts are expected to adjudicate on specific issues in specific cases, the overall educational system can never be the focus of a Court decision, since the decision seeks to redress a specific grievance of a litigant and safeguard his rights as a citizen.

The recent Supreme Court decision in the 'TMA Pai Foundation and Others vs State of Karnataka and Others' has mentioned the idea of the intake as "minority/management quota" (Para 151,152 of the judgment) This is likely to cause a lot of confusion at the time of admission. Who constitutes "management" in a Government - owned, Government - managed institution? The Director / Principal? The State Director of Higher / Technical / Medical Education? The State Secretary for Higher / Technical Education? The Chief Secretary of the State ? The concerned Minister? The Cabinet? Likewise, in a University Department or University - managed institution, a similar problem will arise. Is "management" the Principal / Director? the University Registrar? the Director, Board of College and University Development? the Vice Chancellor? the Management Council as a Collective Body? We must be clear about this, as otherwise we cannot fix "responsibility" in case of a "wrong admission" under this "quota". Let it also be noted that these institutions are "public bodies" and are subject to a lot of "external pressures" at the time of admission.

Another problem that has arisen this year is the quantum of fees to be charged. The authority vests with a State Level Body. But what formula is to be adopted which will give a "reasonable" surplus from the fees to the institutions.? How will the "grants" be treated? Will the fees be different for aided and unaided institutions? What about those institutions who generally have seats "vacant" after the admission season? Will these institutions be permitted to increase the fees to take care of the "normal" vacancies? How will you collect the data in cases where accounts of the institutions have not been audited? (and will the Institutions be really penalised for not having the audit of their accounts completed?) What about Institutions, which run several courses, but have their accounts presented in a consolidated form? In that case, how are "common" expenses to be allocated over the several course? And does the State level Body have the expertise in this detailed aspects of cost accounting when the institutions themselves do not have a system to be able to compile and present the data for getting the approval for the fees to be charged? And can this entire exercise be completed before the next academic year begins?

The multiplicity of court decisions only adds to the confusion that already exists instead of adding clarity to the system that is already confused! Let us resolve that no issue relating to education will ever be referred to the courts and waste their and our precious time. Let all the issues be resolved through an appropriate mechanism within the Regulatory Authority; may be, through a Grievance Redressal Committee. Let each dispute be resolved keeping in mind the effect of the dispute resolution on the overall system of education. Let us abolish immediately the Tribunals set up under the State Education Laws and resort more and more to Conciliation and Arbitration procedures. The Tribunals have simply failed to deliver the goods.

Need for a Policy

The Government should confine itself to the formulation of a sound educational policy, and to review it from time to time based on social needs. The policy formulation and review must be done in consultation with people - particularly the experts in the various disciplines. The policy must keep in mind the trends in population growth and the developments expected in various fields. No educational policy is complete without a proper assessment of the present and the future manpower requirements by type of skills, backgrounds and experience. Government must leave the implementation of the policy to those who know education best, i.e. the professionals and the teachers, with support from industry and other groups who are likely to benefit from the output of the educational system.

In the field of education, Government needs to have its priorities right. May be it concentrates on primary education, particularly in the rural areas. Government must exit slowly from other areas of education and leave the field open to those who can manage things better. However, this does not mean a "license" to do "what you want". Government should, in consultation with experts, ensure that there are broad guidelines in force and that there is an effective mechanism to ensure that the guidelines are properly implemented. This will ensure that some elements do not use the system to exploit innocent and unwary parents and students. Any institution failing to meet the guidelines satisfactorily or exploiting the students must be severely punished.

Need for Fresh Ideas

Indian culture does respect age and grey hair! Every time we feel the need to look at the problems of education, we appoint a committee packed with people with sufficient grey hair. Most of them are retired, and are not even active in the system. There is a tendency for these Committee members to resist change - on the assumption that old practices are the best! Therefore, very rarely do you find a radical reform coming out of a Committee's recommendations! Unfortunately, this is not enough as we globalise and open up more and more. Instead of being "inward looking", the committees need to "anticipate" issues and provide for them! There should be age limit of maximum 65 years in all cases

Corruption, Incompetence and Inefficiency

It is shocking to note that the education system is not free from corruption, incompetence and inefficiency There is corruption in trying to enter a good institution There is corruption and malpractice in examinations There is corruption and impropriety when teachers do not adhere to a proper code of conduct and indulge in things that are unbecoming of a noble profession like teaching! Is there really a code of conduct for the profession today? In the ultimate analysis, the size of the pay packet does matter, a feeling of belonging to a "noble" profession is no longer considered worthwhile! There is red tapism all round delays in getting sanctions and approvals, delays in holding examinations and in declaring the results, delays in appointing teachers and so on. Computers are purchased for the Computer Lab (where "kickbacks" are frequent) but no personnel are appointed to man that lab (because no "kickbacks" are available!) It is astonishing to note that in several cases, where computers have been purchased, there is no software to run them simply because the academician (head) cannot provide the "babu" with the mandatory "three quotations" for the required "proprietary" software!

The academicians are simply at the mercy of "babus" and must be able to "please" them if they wish to have even a fraction of what they need! And do you know that in institutions providing computer education, computers are rarely used in administration because the "babus" do not want that! Institutions that impart management education are often "mismanaged" since the "babus" decide what type of management the institution deserves!

If you look at the composition of the manpower in the system, you will find a small number who are supposed to teach, but a formidable army of those who are supposed to help the teaching-learning process. These are the "babus" of administration-dom. Instead of facilitating the teaching-learning process, they prefer to be hurdles and obstructions. They determine academic priorities - to the total detriment of the quality of education. They constitute the "non-performing" overheads of the educational system at the micro-level and a significant proportion of the cost per student. It is not appreciated that the saying "more is merrier" is dangerous in academic administration. The reality is that more generally means more incompetence, more inefficiency and more corruption. Let us cut short the administrative processes and make them more transparent. Let us have fewer people who are better paid. Let us have more automation and speed and transparency in administration. Let us remember that incompetence and inefficiency often leads to blatant violation of laws and failure to comply with requirements like regular audit of accounts and compliance with important laws like that of Provident Funds, Income Tax and Service Tax. There is a volcano waiting to erupt in some of our institutions.

Government Perception

Government have set up IMs, IITs, RECs etc. There is a bias that they are the best; that other institutions will never make it. This is wrong. Any institution, given proper leadership and the kind of support that Government-sponsored, Government-managed institutions have, can do equally well. We do have a large number of Government-managed institutions performing deplorably due to the interference from politicians and bureaucrats!

It would not be wrong to say that there is a unholy nexus between the politicians and the bureaucrats. We often see the bureaucrat having to be submissive to the politician in the interest of his own career! This leads to the growing political influence in the educational system. It must be stated that there are also a few exceptions to this general condition. There are politicians who understand the value of education; and they spare no pains to run the educational institutions they control on professional lines.

We often notice that the shortcomings in Government-managed institutions are generally overlooked, but if these shortcomings are found in privately managed institutions, action is initiated against them. In fact, many of the Government-managed (and University-managed) institutions fall very much below the norms and standards laid down by the regulatory bodies like the All India Council for Technical Education.

Financing Higher Education.

We are slowly moving away from an era of highly subsidised higher education. We now have institutions set up on "no grant" or "self-supporting" basis. These institutions have to meet their operating expenses out of their income from tuition fees. They could also raise resources from consultancy services, other need-based short-term courses etc. However, despite the fact that they get no aid from Government, they have to bear with the rigid Government controls, and comply with all those rules and regulations that would normally apply to Government-aided institutions. It would be much better if the Government simply lays down broad norms/guidelines and stops interfering in the day-to-day matters. The institutions should function within the framework of these guidelines. Government could institute a system of monitoring so that the freedom given to the institutions is not used by them to exploit the students. This is broadly the spirit of the Supreme Court decision in the TMA Pai Foundation case.

What has been stated above in the case of the Government's role should also apply to the role of the University vis-a-vis its affiliated / constituent colleges, its own teaching departments and its management institutions if the spirit of the Supreme Court Order is properly understood and implemented. The "reaction" of some of the State Governments / Universities to this Supreme Court order is very "interesting". After deliberating on the judgement for several months and in the process, delaying the admission process considerably - attempts are being made to make the system more "regimented" than before instead of freeing it from the "shackles of controls" as the Supreme Court desired! After all, you cannot change mindsets; particularly, not in India!

Number of Institutions

As we have already stated, the distribution of the Institutions of Higher Learning across the country is not uniform. Certain centres like Mumbai and Pune have a large number of institutions and many of them provide quality education. There is a lack of quality institutions in several parts of the country. This leads to the "migration" of students to Centres where quality education is available. Government could consider providing incentives like cheap land and tax concession to Societies and Corporates willing to set up Institutions of Higher Learning in areas where there are not many institutions. Good Teachers must be available at such centres by offering better pay packets and providing housing, medical and educational facilities in such areas. The "babus" who control the educational system make available to themselves all the benefits and privilege available under the system, but deny them to the teacher who is unaware of what benefits are available in the system! Let us remember that we need to develop the social infrastructure if we are to progress socially and economically.

Support from Industry

Industry is the main beneficiary from the output of the educational system. However, Industry has not been making the contribution to education. Some of the ways in which industry could help are:

(a) Scholarship to students and Chair Professorships to attract teaching talent. Corpus funding to provide retirement benefits to teachers retiring from "no grant" / "self supporting" institutions who may not even get their own Provident Fund contribution from a system that pays scant regard to accounting and auditing of provident funds. And teachers have poor medical or other benefits whatsoever.

(b) Encouraging its managers to teach at these institutions and encouraging the teachers in the institutions to work for a few months each year in their organisations.

(c) Encouraging collaborative research activities.

(d) Participating in the Institutions' Placement Activities as well as in the Seminars and conferences that these Institutions organize.

(e) Organizations could use the students of these institutions to carry out surveys, interviews to collect data etc.

(f) One cannot really blame industry for not coming forward generously. There are several institutions who have taken huge donations and used them for purposes other than what were agreed upon. There are institutions which have not bothered to even render proper accounts for the amount spent by them simply because their own accounting system is in a "terrible mess" or because their "babus" have created an "inextricable mess" in the utilization of the donations!

Foreign Education

You simply cannot prevent foreign Universities from setting up shops in India. Neither can you prevent Indian students from going abroad. However, we certainly can look at the educational processes and bring them up to international standards. These processes include:

- Curriculum Development
- Curriculum delivery
- Evaluation / Testing

We have a long way to go in each of these three areas.

We have a penchant to teach outdated courses since we do not want our teachers (who are experts in their own fields) to become "redundant" So we frame the curriculum around the knowledge-base that is currently available. We do nothing to retrain the teachers to equip them - with new knowledge. We do little about encouraging academic interaction beyond the borders of the country or even in interdisciplinary interactions within the country and within the same institution

We still cling on to the conventional lecture method which emphasis on the teaching process without giving due emphasis to the learning process. The participation of students in the learning process is not encouraged. Students are not encouraged to think for themselves since we still believe that spoon feeding is the best form of education.

Our evaluation systems are erratic - since we deal with large numbers. We do not seem to realise that a three-hour examination cannot test the knowledge acquired and the ability to apply that knowledge. The subjective element in the evaluation process cannot be eliminated. There is no substitute for a continuous assessment and counseling that a teacher can provide to the student. We need to change our mindset about accepting the marks scored in a public examination at the end of the year or semester alone as the symbol of academic achievement of a student.

These issues need urgent attention. We cannot go on appointing expert committees, receiving their recommendations, forgetting all about them and repeating the process all over again.

The entry of foreign Universities / Institutions in the field of education could have very wide ramifications. We should not be surprised if these institutions purchase outright (or gain management control over) Indian institutions which are undermanaged. This could happen anytime after the year *2005!*

Working Conditions

We take care about the lighting and working conditions in our factories. We devote considerable attention to the layout, decor and working conditions in our offices. But what about our schools and colleges? Classrooms not adequately furnished or lit; blackboards not painted; no fans seem to work. The noise levels outside the classroom prevent concentration on serious academic work inside the room. Teachers do not have a place to themselves where they could read, meet students and do research! The service conditions, particularly in the "no grant" / "self-supporting" institutions are appalling. When colleges do not provide the bare minimum of library and computer facilities to the students (though they pay for these services) it is too much to expect that the teachers will have access to these facilities. And how many teachers, given the size of their pay-packets can afford the luxury of a personal library or a personal computer? And where institutions run conventional courses and courses on "self-supporting basis", teachers appointed to teach "self supporting" courses are often treated as Second Class Citizens within the same institution!

If we do not pay heed to these issues, we cannot expect teachers to give the best of their jobs.

Politicalization of the System

We have briefly touched on this topic earlier. We need to emphasize a few points here. Education is big business into which many a politician has launched himself, perhaps as an alternative to his *present vocation (in case he goes out of power!)* or to supplement his present income, or to provide for the period when his political career could come to an end. The politician cannot be expected to devote the necessary time and attention to run the education business. He, therefore, entrusts the job to his "trusted" associate, -who may not always understand the subtle points involved in running the educational system.

Of course, as stated earlier, there are a few exceptions to this general condition: A few institutions managed/controlled by politicians are indeed run professionally.

In theory, Universities are headed by academicians. In practice, the heads of Universities are political appointees who cannot withstand the too frequent political interferences in the educational system. The time spent in dealing with the "external environment" leaves very little time to look inward-to-straighten out the problems within the University. *It is time to consider whether heads of Universities MUST be politically appointed? Why can't they be* elected by the teachers and students on the basis of their performance - AND after an orientation in Academic Administration?

Working of University Teaching Departments

Universities are part of the Regulatory system *in education. They are responsible to lay down norms* and ensure their implementation. Very often, the teaching departments of the Universities fell behind in implementing these norms. Funds collected by way of tuition fees in one department (with better student enrolment and higher fees) are used to subsidize the weaker departments (often "undermanaged"). This results in a uniform reduction in the quality of education across the University. Teachers are not appointed as required, laboratories and libraries are ill equipped. Delays in administrative decisions stifle all academic work. How many Universities have proper accounting and control system? How many have capable accounting staff who KNOW accounting principles? How many Universities are able to get their accounts audited every year? And why can't we have a system of "publishing" the accounts so that the STAKEHOLDERS know how the University manages it finances? ❑

From the Copying Mode to the Forward Engineering Mode

R A Mashelkar, FRS, Director General, Council of Scientific and Industrial Research, New Delhi delivered the Convocation Address at the fifth convocation of Tezpur University, Tezpur on October 16, 2003. He said, "The difficulty with science or business is often not with the new ideas, but in escaping the old ones. A certain amount of irreverence is essential for creative pursuits. I believe that if we promote that irreverence by change of personal attitudes, creating that extra space for risk taking, respecting the occasional mavericks and rewarding the risk takers, then India will certainly be in a leadership position". Excerpts

I consider it to be a great honour and a special privilege to have been invited to deliver the Convocation Address of Tezpur University. The products of this University have done the nation proud.There are enormous expectations from everyone about this University's role in building the new India.

Let me begin by extending my wholehearted congratulations and my very best wishes to the young graduates. You are going to enter a new exciting world which is changing rapidly. Indeed, you will see a sea-change in the economic, political and technological environment the world over. There are extra-ordinary opportunities for those, who are prepared to face the challenge of change. Indeed, only those of us will survive and succeed, who will be able to anticipate the change and also exploit the change. And those who do this will one day lead the change. We in India should have the ambition of leading the change and make things happen on our own terms. It is all of you, who will build the new India of our dreams in the 21st Century. This new India of our dreams should be an innovative India.

Everyone recognizes that the Twenty-first Century is the 'century of Knowledge'. Nations, which have developed mastery in the production of knowledge, its dissemination, its conversion into wealth and social good, and its protection have assumed a leadership position in the world today. But it must be recognized that knowledge without innovation is of no value. It is through the process of innovation alone that new knowledge can be created. It is also innovation alone, which converts knowledge into wealth and social good. In fact, innovation must become a way of our life. Why do I say this?

India was a leader in innovation several centuries ago. Indeed, since the Indus Valley Civilization of about 5000 years ago, innovation has been part of the Indian culture and the basis of its civilization. Our innovations were diverse and pioneering. Indian civilization was characterized by scientific thought, capabilities and techniques, at levels far more advanced than others

In spite of this great heritage and record of accomplishments, why did India fall behind in the ensuing centuries? When the scientific and industrial revolutions took place in the west a few hundred years ago, there was a period of stagnation in India. Lack of development over this period was a result of a hierarchical approach, irrational subjective thinking, and build up of superstitions and superficial ritualism The earlier great traditions were allowed to decay. A highly feudalistic structure of society developed It was in this state of its society that India came under the colonial domination By and large, compared to other nations, inhibition and imitation in the society was evident during a substantial part of the Twentieth century. We lost the leadership position. This cannot continue into the Twenty -first Century. We must regain this position with determined action.

We have now an opportunity to start the resurgence of an innovative India today. What do we need to do? We need to build new social, legal and economic structures that will support innovation We need to make the symbol of I in 'India' to stand for 'Innovation. I am convinced that just as we had launched a freedom movement, which freed us from the stronghold of foreign powers, we must launch an 'Indian Innovation Movement' now, so that India can assume its rightful place in the comity of nations. And the time to do it is now, at the dawn of the new millennium.

Our confidence in building the new innovative India of our dreams stems from our major successes in the arena of many technological innovations, which have made such a difference to the nation. Some prominent examples include the blue (space), green (agriculture), white (milk) and grey (software) revolutions. Let us just take one example. The Indian space program, for example, has designed and sent into space a series of satellites that, among other things, comprise the largest domestic communication system in the Asia-Pacific Region. It has also developed a range of launch vehicles, the most recent being a geo-synchronous launch vehicle with an 1800 kg payload. These developments have helped in the application of space technology for national needs in communication, meteorology, broadcasting, and remote sensing. All of this has been achieved in a relatively cost-effective manner - the Indian space program'scurrent annual budget is equivalent to US $450 million while NASA's budget, in comparison, is over $15 billion Other innovations serving specific Indian needs include C-DOT digital switches, CorDECT cost-effective wireless-local-loop products, the Simputer, which is a low-cost computer and the Param supercomputer The last is an example of "denial-driven innovation," illustrating that India has the potential to tackle highly advanced technological issues, given the proper motivation.

The landscape of technology innovation in India is not static It is continuously evolving It has undergone a number of positive developments over the past decade. Let us reflect on some of these There has been a paradigm shift that is reflected in a move from research as an end in itself to research coupled with technology development, with this linkage being increasingly driven by socio-economic needs The perspective has also shifted from primarily a local or national focus to a global one, with the globalization of R&D being a major driving force This has resulted in some major transitions: for example, the pharmaceutical sector that was based on formulations of imported drugs in the 1960s has slowly enhanced its innovative capabilities and is now gearing up to compete with the global players Realising the power of Indian intellect, we have seen more than 100 top companies from abroad set up their R&D centers here in India.

Technology entrepreneurship has begun to establish itself While creation of high-technology start-ups has been dominated so far by information technology services and software, there is also activity in knowledge-intensive sectors such as biotechnology and IT-hardware.

There is also an emergence of innovative models of entrepreneurship. The TeNeT group at IIT Madras, for example, has spun off-with faculty, student and alumni involvement - a series of firms that are engaged in a range of activities from IT product development to provision of technology-based services. Scientists from Indian Institute of Science have set up companies such as 'Strand Genomics'. The nanoscience group at National Chemical Laboratory has had a breakthrough on nanotechnotogy to make unique materials, which is leading to the formation of a company. CSIR is tied for number one position along with Samsung from Korea in the 'top fifty' list on patents released by WIPO this year. Forihe first time, we are seeing that the route to 'Lakshmi' through 'Saraswati' is being seen by our scientists and a new breed of technoprenuers and they are marching on that route with gusto and determination.

What are India's major strengths in technological innovation? On the human resource front, India has the largest pool of qualified engineers in the world, the 7th largest pool of R&D personnel, and a large cadre of expatriate scientists, technologists, and entrepreneurs, who are increasingly engaged with their home country. On the institutional front, India's assets include numerous institutions of higher learning as well as an impressive array of research centers and laboratories that focus on a large range of scientific and technical problems. India has a huge domestic market, with potential customers numbering a few hundred millions. We have an economy that has grown at almost 6% per year over the last decade, not many countries have done so. There are exceptional leaders within the government, academia, and the business domain who are promoting and catalyzing institutional transformation (both revolutionary and evolutionary) in a number of ways.

Our new innovative India will have to be built by concentrating on our youth, which represents the national strength, vitality and vigour. If properly moulded, the youth can become the champion of our culture, custodian of our national pride and a trustee of the freedom of the country. Our youth must imbibe the spirit of a true innovator. Innovators are those who do not know that it cannot be done. Innovators are also those who see what everyone else sees, but think of what no one else thinks. Innovators refuse status quo, they convert inspirations into solutions and ideas into products. Building such innovators will require an all-pervasive attitudinal change towards life and work

-a shift from a culture of drift to a culture of dynamism, from a culture of idle prattle to a culture of thought and work, from diffidence to confidence, from despair to hope. Revival of Indian creativity and the innovative spirit needs to be made into a national movement today.

How can we induce creative thinking amongst our young people? The young budding inventors can learn a lot from the legendary career of an inventor like Thomas Alva Edison. As we know, Edison was granted a record of 1,093 patents for inventions ranging from light bulb, typewriter and electric pen to his phonograph and motion-picture camera. His work methods reveal that the real keys to unlocking creativity are an open-minded approach to learning and perseverance.

When Edison died in 1931, he left 3500 note books which read like a turbulent brainstorm. It shows Edison's mind at work spanning most of his six-decade career. They offer fresh clues as to how Edison, who received virtually no formal education, could achieve such an astounding unrivalled record of inventiveness.

How do ideas get generated? Curiosity provides the stimulus for the production of ideas. Curiosity prompts us to ask questions and explore further. As Einstein said "He who cannot wonder, cannot feel curious about things around him, is as good as dead, a snuffed-out candle". Edison was curious and therefore he could generate new ideas. Edison felt that his lack of formal education was, in fact, a 'blessing. This enabled him to approach his work with far fewer assumptions than his more educated competitors, who included many theoretical scientists, renowned doctorates and engineers.

When an experiment failed, Edison would always ask what the failure revealed and would enthusiastically record what he had learnt. He had an enormous talent for appropriating ideas that may have failed in one instance and using them for something else. Whenever he succeeded with a new idea, he would review his notebooks to rethink ideas and inventions abandoned in the past in light of what was recently learnt. He would often jot down ideas others had come up with in other fields.

The lessons that we learn from Edison's life are simple. First, whether in Science or business, challenge the assumptions continuously. Do not have a preset or prejudiced mind. Let the windows of your mind be always open. Second, patience and perseverance pays. Third, nothing is final. Strive for creating products that are better than the best. And displace your products yourself. Finally, you can learn more from your failures than you can from your successes. So do not be afraid to fail. Take risks. Indeed, risk taking must become a part of the national innovation policy.

The difficulty with science or business is often not with the new ideas, but in escaping the old ones. A certain amount of irreverence is essential for creative pursuits. I believe that if we promote that irreverence by change of personal attitudes, creating that extra space for risk taking, respecting the occasional mavericks and rewarding the risk takers, then Indian will certainly be in a leadership position.

We need to highlight inspirational stories, which illustrate the point that even in India, people, who have done 'out of the box thinking' have won and achieved hugely. Mr. Arun Shorie, when he was the Minister handling the Ministry of Personnel, Public Grievances and Pensions, had organized an inspirational series of talks on "ideas that have worked'.

In this series, several people spoke. N.R. Narayana Murthy spoke of how by putting together Rs. 10,000 and starting in his small 700 square feet apartment, he built Infosys. Its market capitalization, at one point of time, was more than Rs. 60,000 crores. Infosys has become a pride of the nation today. Mukesh Ambani of Reliance spoke about building the largest green field refinery complex at Jamnagar with an investment of five billion US dollars in a record time of 36 months at a capital cost that was 50% lower than similar refineries and commissioning it in three months as against the international norms of six to 18 months. There were others like Dr. Kurien talking about our white revolution and making India a global leader in milk production in the world. E. Sreedharan spoke about building the 760 km Konkan Railway project in one of the most difficult terrains ever encountered in the history of railway construction by using the jnost sophisticated technology. Chandrababu Naidu spoke about his assuming the role of CEO of Andhra Pradesh. He has converted Hyderabad into Cyberabad within no time. It is a world class city today. Ratan Tata spoke about building the car 'Indica' by using 700 engineers, who had no experience of designing an automobile, and at a development cost, which was one tenth of the international cost. By the way, Scorpio is an equally inspirational story, of which we are extremely proud. I myself spoke about transforming some of our national laboratories from the 'reverse engineering mode' or 'copying model to 'forward engineering mode'. CSIR today exports our knowledge even to leading multinationals in USA and Europe, whose budgets are bigger than India's R&D budgets. And there were others who spoke from different fields, whose ideas had worked right here in India. The simple message is that we can do it in India, in all fields, in all sectors.

What would we really require for transforming India? Let me give you a lesson I drew from a recent incident. I was involved in the process of interview for the Chief Innovation Officer of National Innovation Foundation. I found that the individual that I was interviewing had experience in branding a product. I said 'I want to brand my India. How would you do that?' He was puzzled. He had branded a soap, a refrigerator, but he wondered as to how he could brand a nation? I said 'I will make it easy for you. Let me tell you as to how other nations brand themselves. For instance, US brands itself as a land of opportunity!' He immediately replied, 'I will brand India as a land of ideas'. Now here is the issue. India is a land of ideas but it is the USA that is a land of opportunities. That is why our young people with aspirations go to the USA, which provides them an opportunity to reach their own potential. I read some statistics on the other day that 2% of Indians, which are non-resident Indians, who work in those 'lands of opportunity' outside, generate an economic output which is almost the same as India's economic output, which 98% of us generate from within India. Our challenge, my young friends, is to make India a land of opportunity. That again requires positivism and a faith in ourselves.

I would like to end by emphasizing that the future of India can be built by remembering and practising three things, which are encapsulated in the world TI'. Firstly, TI stands for Think India'. We must have India in our hearts and minds. As someone had said, India's response to WTO should be WTI, that is, 'We Think for India'. The second meaning of TI is Team India'. We all must work as a team, breathe as a team and strive forward as a team. TI also stands for Total Innovation'. This means making India truly innovative by changing its social, legal and economic structures. The most important pledge we should take today is that, we should make the national symbol in I in 'India' stand for 'Innovation'. If we Think India work with the spirit of Team India' and push forward the movement on Total Innovation', then I am confident that India will find its rightful place in the comity of nations, which is right at the top. ❑

CALENDAR OF EVENTS

Proposed Date of the Event	Title	Themes	Names of the Organising Department	Name of the Organising Secretary/ Officer to be contacted
January 29-31, 2004	ISTD-XXXIV National Convention	Impacting Bottomline through People Sub Themes. Emerging Concerns; HR Challenges; Value Creation: HR at crossroads-Performa or Perish	Indian Society for Training and Development (Kolkata Chapter)	Mr. Khokan Mookerji, Secretary General, ISTD Convention Secretariat, C/o Indian Aluminium Co. Ltd., 1, Middleton Street, Kolkata-700 071. Tel: (033) 22402210, 22809710 (Ext.381). Fax: (033) 22403964, 22478808. E-mail: khokan@indal.co.in. Or Air Cmde Amrit Lal (Retd), Executive Director, Indian Society for Training & Development, Training House, B-41, Institutional Area, New Mehrauli Road, New Delhi 110 016. Tel: (011) 26867710, 26857157. Fax: (011) 26867607. E-mail:istd@ren02.nic.in

Refresher Programmes for Distance Educators

Indira Gandhi National Open University (IGNOU) and the Distance Education Council (DEC) have been making consistent efforts to implement Continuing Professional Development (CPD) Policy for teachers, professional and technical staff, and non-teaching staff working in the open and distance learning system comprising one national open university, 10 state open universities and 102 distance education institutes located in the conventional universities in the country. In line with UGC Refresher Programmes, DEC-IGNOU has conducted two three-week Refresher Programmes on 'Distance History Education' recently. The Programmes were jointly coordinated by STRIDE, School of Education and School of Social Sciences of IGNOU. The programmes laid special emphasis on distance teaching for technology-enabled education, and covered 60% discipline areas and 40% areas of distance teaching. The resource persons were drawn from University of Delhi, Jawaharlal Nehru University, Jamia Milia Islamia, National Institute of Educational Planning and Administration, National Council of Educational Research and Training, Teen Murti and IGNOU.

Inaugurating the Programmes, Prof. H P Dikshit, Vice Chancellor, IGNOU and Chairman of Distance Education Council emphasized that distance learning is now well recognized and respected by scholars all over the world including India, and the joint declaration by Heads of UGC, AICTE and IGNOU for compulsory accreditation of university distance learning programmes by DEC shall go a long way for further collaboration and convergence in higher education. He pointed out the statutory requirement of DEC approval of all certificates awarded to learners pursuing studies through distance mode in different universities. "In the Tenth Plan period the central government's directive is to expand the student share of distance education to 40% from the present 20% and hence there will be increasing need to train and retrain faculty and staff from time to time," he said.

Prof. S C Garg, Pro Vice Chancellor, IGNOU while explaining the broad policy guidelines on CPD envisaged in Vision and Mission Statements of DEC, highlighted that the Council shall coordinate with UGC on equivalence of these courses with those offered by Academic Staff Colleges for career assessment. He assured the DEC's support for the activity and suggested that the state open universities and university distance education institutes should also organize such programmes at the regional level.

The Programmes were coordinated by Prof. Santosh Panda, Professor, STRIDE; Dr. C R K Murthy, Reader, STRIDE; Prof. Swaraj Basu, Professor, School of Social Sciences; and Prof. S V S Chaudhary, Director School of Education. Earlier, the first Refresher Programme on Distance Science Education was organized in 2001 at IGNOU by Prof. Santosh Panda and Prof. S C Garg.

University of Madras Convocation

The 146th Convocation of the University of Madras, Chennai was held recently. Dr.M.S. Swaminathan, Agricultural Scientist was the Chief Guest of the occasion In his address, Dr. Swaminathan suggested creation of a 'Patents Bank for Peace and Happiness'. "Scientists and technologists from universities and public research institutions could assign their patents to the bank, so that the fruits of scientific discoveries could be made available for public good The patents bank could be set up under the umbrella of the Universities Grants Commission. It would stimulate scientists to consider themselves trustees of their intellectual property, sharing their inventions with the poor in whose lives the inventions could make a significant difference for the better," Dr. Swaminathan said.

Starting off his address by reminding the graduates of India's progress in science, he pointed to the growing and widening rich-poor divide. "Jobless growth was spreading, as also technological and economic apartheid," he said. Today, he said the world faced a 'trilemma'-three billion people struggled owing to 'under one dollar poverty' but sought peace and equitable economic development; there was growing violence in society and in the human heart, and thirdly the technological divide between the industrialised and developing world. If access to technology was a major cause of economic inequality in the past, the challenge now lay in enlisting technology as an ally in the movement for social and gender equity. "This was where universities could play a catalysing role," he said.

"While the contemporary developmental challenges were formidable, advances in different sciences and technologies provided hope. Genomics, Proteomics, Internet, Space and Solar Technologies and emerging Nano-technologies were opening uncommon opportunities for converting the goals of food, health, literacy and work for all into a reality However, such opportunities could be realised only if the technology push was matched by an ethical pull," said Dr. Swaminathan. "Scientists should promote a public understanding of these issues and their long-term implications, and in launching an 'ethical revolution'. Universities should ensure that science and technology were employed for the benefit of human kind and not its destruction," he added.

The Chancellor and Honourable Governor of Tamilnadu Shri P.S. Ramamohan Rao, presented the degrees, prizes and awards to 441 candidates (besides 95,000 candidates in absentia) and administered the graduate's pledge The Vice Chancellor, Prof. S.P. Thyagarajan, said that the UGC had sanctioned Rs 10 crores to the University for 2003-04 under the Potential for Excellence grants to be utilised for herbal sciences and for its overall development.

Among the distinguished performers were eight candidates who got more than five prizes/awards. The group was led by Shri S. Ramesh (M.A. History, C. Abdul Hakeen College, Melvisharam in Vellore District) who got eight prizes/medals. The others were Ms. R. Uma (M.Sc physics, D.G Vaishnav College, Chennai - six prizes); Ms.P.S Rekha (M.Com, Anna Adarsh College, Chennai - five prizes); Ms. Arti Kalro (MOP Vaishnav Women's College, Chennai - six prizes), Ms B Kanchana (MOP Vaishnav Women's College, Chennai - five prizes), Shri. J. Karthikeyan (A.M Jain College, Chennai - seven prizes); Shri Noey Sara Indra (Auxillium College, Kâtpadi - five prizes), and Ms C Premakumari (AA. Govt Arts College for Women, Walajapet-six prizes).

National Integration Camp

The Promotion of National Integration provides the framework for greater exchange and understanding among the youth belonging to different regions of the country. It aims to foster national integration and communal harmony. National Integration remains a crucial issue in India, notwithstanding the fact that we boast of a civilization, which is nearly 5000 years old. True, some of the divisive factors may be inherent in the history, geography and culture of our country, but there are also forces, which accentuate these factors. Religious fundamentalism is one such force while linguistic diversities constitute another. There are people in this country who hold an exclusive view of religion which drives them into a sectarian frenzy that does not admit of tolerance of other faiths. Despite a shared culture of so many years, linguistic diversities have often generated tensions and conflicts amongst different communities threatening the fabric of national unity. The same holds good for regionalism exacerbated no doubt by inequitable development amongst different regions of the country. The age old caste system has also contributed in no small measure to weaken the bond of unity among different sections of the society. All the above forces and factors do pose a serious challenge to India's unity and integrity and, therefore, conscious efforts will have to be made by all concerned to preserve the same. The youth of the country in particular will have to be put in the vanguard of such efforts. Keeping this in view, the NSS Unit, National Institute of Technology (NIT), Silchar in collaboration with Ministry of Youth Affairs & Sports, Govt. of India is organisng a National Integration Camp from Feb. 02-11, 04.

The Camp is meant for the youth/students of the academic institutions. One institute can nominate 6 to 10 students (preferably a cultural team) along with the NSS Officer/Staff. It aims to provide the youth from different parts of the country and from diverse religious and cultural backgrounds a common platform to interact with each other, know each other's customs and life styles, to work together in community welfare projects and in the process make them aware of the underlying unity amidst diversity. By living together in a camp, albeit for a limited period, the youth would develop better understanding of different perceptions, beliefs, faiths and life - styles, which in turn would strengthen a secular and eclectic outlook on their part. The camp activities are planned for the youth in order to instill in them the spirit of national integration through:

- Seminars, discussions, informal meetings, group discussions, debates, lectures, essay and elocution competitions on the theme of national integration and communal harmony.
- Community work like mass literacy, anti-drug, anti-AIDS, pulse-polio, health awareness and environmental campaigns.
- Cultural programmes.
- Spiritual discourses.
- Yoga and meditation.
- Work - camps in which the youth donate manual labour to create durable community assets.
- Visit to places of historical importance and scenic beauty as well as to the sites of important developmental projects.

Eminent faculty members/experts/social scientist/parliamentarians from various institutions throughout the country will deliver/conduct the lectures/practical/technical sessions. The participants will be provided with comprehensive course material on the issues/subjects related to the Camp theme. The participants will be reimbursed student conscessional second-class train fare, in the shortest route, for attending the Camp on the production of the Original tickets. However accompanied staff is expected to arrange the TA/DA from the parent organization. Free boarding & lodging facilities will be extended to the out-station participants in the institute guesthouse/ hostels on sharing basis.Those desirous of applying for the camp may submit the duly sponsored application by 10.01.04. For further details contact Shri Kishor C Satpathy, Coordinator, National Integration Camp, National Institute of Technology, Silchar - 788 010. Phone: 03842-233841 / 42* 5123(O), 240055(D), 240906 (R) Fax: 03842-33797/ 240055. E-mail: kishor_satpathy@yahoo.com

Seminar on Translation

A Seminar on 'Translations in Prose and Poetry' was organised recently by Pub Kamrup College, Chiriali, Assam under the joint auspices of North East India Forum for English Studies (NEIFES) and English Language and Literature Development Society (ELLDS) of the Department of English of Pub Kamrup College. Welcome address for the Programme was delivered by Ms. Dipsikha Bhuyan, Head, Department of English Pub Kamrup College. Prof. Phuleswar Dhing, Principal, Pub Kamrup College addressed the Seminar as the Chief Guest while Ms Bomali Bhuyan, Secretary, NEIFES delivered the inaugural speech outlining the activities of NEIFES. Ms. Mitra Phukan, noted Translator and Columnist delivered a lecture on translations in prose. In her deliberations Ms. Phukan while talking about the general norms of translation referred to her own experiences and the constraints she faced in her attempts to be true to certain cultural ethos that seem to have no exact equivalence in the target language.

Prof Surajit Barua, President, NEIFES delivered a lecture on translation in poetry. Starting his discussion with the comment that translation of poetry is quite different from translation of prose, Prof Barua developed his deliberation with reference to translations of the poems of a number of modern Assamese poets including Kabin Phukan, Nilmoni Phukan, Lutfa Halim and so on. He also read out some of his own renderings (into English) of the poems of these poets. Participants of interaction session included Prof Sarat Ch Deka of Goreswar College, Prof Khagen Talukdar, Prof Rezina Khatun, Prof Nripen Talukdar, Prof Montu Saikia of Pub Kamrup College and Dr Tondra Borbora of KRB Girls' College.

Forum for Literary Translation at JNU

In an effort to understand more about other countries, through their literature, the Department of School of Languages, Literature and Cultural Studies, Jawaharlal Nehru University(JNU), New Delhi is reported to have launched recently a novel concept — 'Forum for Literary Translation' where books written by authors of other countries in their languages, would be translated into Hindi and English by the teachers' fraternity of the JNU. "The whole idea is to understand the tradition and culture of other countries, through their literature. Literature is perhaps the best source for seeking information about a country, its development and the cultural changes that have taken place," said the Coordinator of the Forum, Prof. Devender Choubey.

For students, the forum has opened an opportunity to interact with authors of their own country as well as other countries. "It is not only Professors of our Department that are assisting us, Professors of other Departments of the University are also involved in the translation process," said Prof. Choubey adding that so far, the Forum Members have translated around seven books into Hindi and English from their native languages, which include literature from Mauritius, Japan, China and Afghanistan. Once the translation process is over, students and the teaching staff are invited for a reading session which gives an opportunity to the participants to seek answers to their queries.

"This is certainly a good idea to translate literature from its source language to target language which means there is no change in order of the word. These translated books provide us an insight into a country's literature as well as its traditions", said Shri Uppal, PhD (Hindi) Student of the Department, who is planning to translate Sri Lankan literature into Hindi as part of his thesis. "I have a great liking for the Sinhali language and the forum has only provided me with a great idea for my thesis," the student added.

BVIMR IT Festival

Bharati Vidyapeeth's Institute of Management & Research, New Delhi organized an IT Festival 'Techspan' recently. The event focused on latest trends in the IT industry viz hacking, designing applications, creation of chat rooms, programming in C & Linux followed by events like case studies, IT quiz, extempore and various cultural events. Speaking on the occasion, the Chief Guest Shri Thirunavukkarasar, Minister of State (C & IT), Government of India highlighted that in the emerging knowledge driven economy, Information Technology has become an integral part of business which has resulted in looking at IT as a highly leverage enabling tool for delivery of services both in the public and private sector. The IT sector showed a growth rate of 22% pa in the last decade. He advised the students to upgrade their skills continuously to keep pace with the ever changing IT and the business environment. The Minister dwelt upon the various innovative schemes through a budget allocation of 2% to 3% by the Government of India for IT such as Vidya Vahini and Gyan Vahini programmes which connected 14 Sr. Secondary Schools in seven districts of the county including University of Delhi.

Dr. S. S. Vernekar, Director BVIMR in his address appreciated the contributions made by the Indian IT industry. "The event provides a platform for amalgamation of infotainment with edutainment. Techspan is an IT fest for the techsavvies, by the techsavvies and of the techsavvies. This fest aims to give an opportunity to explore, innovate and create the technical fundamentals," he said. Chief Guests of the prize distribution ceremony were Mr. Gulshan Roy, Executive Director, ERNET, Ministry of IT and Mr. Shekar Borker, Co-Chairman, Expert committee on HRD, ASSOCHAM. They appreciated the contributions of BVIMR in inculcating quality education in management discipline and carving the careers of academics and congratulated the winners in various events.

Marking the occasion, various speakers from the IT world dwelt on IT related themes. Mr. Puneet Gupt from Indus Logic, Mr. Hardeep Gill from MAAC, Mr. Sahil Sahore from Blossom Well, Mr. Rajneesh Makhyak from Convergys India Ltd., Mr. Vikas Vats and Mr. Ashish Khurana delivered their thoughts on BPO Scenario, E-Commerce, Creations by MAAC studio in Multimedia, Psychology of Web sites and Search Engines, and the relevance of an interview and motivation. Some of the most prominent B-schools in and around Delhi participated in the IT fest.

Entrepreneurship Awareness Camp

A three-day Entrepreneurship Awareness Camp was conducted by Fr. Agnel Institute of Entrepreneurship Development, Verna, Goa, in association with the Commerce Department of St. Xavier's College, recently. The Camp was inaugurated by Principal Newman Fernandes, who in his inaugural address, stressed the importance of value addition to the academic subjects taught in College so as to prepare students for employment. He also highlighted the fact that the current generation of Goan Youth aren't venturing as entrepreneurs, as a result of which many entrepreneurs from outside the State are taking the initiative to do so, thus having the Goans no choice but to work under these entrepreneurs. Mr. B. Rajasekhar, Head of Commerce Department welcomed the faculty and participants. Mr. Anthony Pacheco, the Speaker for the first day explained the concept of entrepreneurship and the current trends and opportunities for employment in the State. He urged them to develop a positive attitude and to seek entrepreneurship opportunities. He enlightened the students about the fact that the opportunities for jobs, specially government jobs, is almost nil. Inspiring the students, he urged them to be motivated and encouraged them to motivate others. Mr. Pacheco advocated Positive thinking among the students, to make the best of a bad situation, and to seek opportunity under such circumstances. He encouraged students to look out for all possible prospects and develop the right attitude and thinking patterns.

Mr. A. C. Kamat addressed the students on how to set up SSI (Small Scale Industry) units, the regulations and formalities involved, financial schemes available, subsidies granted, etc. He spoke to the students of the emerging importance of small scale industries and the opportunities available through various schemes of the government and of private firms in providing finance. Among these were government schemes by EDC and NSIC and various other government undertakings, which provide financial aid. Private organizations include commercial banks and other institutions. He later guided the gathering through the entire process of how one could set up a small industry and the legal formalities involved along with the break up of the loans that can be given for setting up cottage, small, medium and large scale industries and other procedures followed. Mr. A. Gracias shared his views on identification of opportunities for entrepreneurship through different means such as SWOT (strengths, weaknesses, opportunity, threats) analysis and Mish Mash questionnaire. He stated that the requirements for a successful entrepreneur are 85% enterprise management skills and 15% technical skills. He stated a number of technical approaches for finding the opportunities for an entrepreneurship endeavor. He also stressed the importance of visiting exhibitions in order to gain information about different trends and new ventures that could be undertaken. Mr. Gracias encouraged students to read newspapers, which provide a wide window of ideas and opportunities. Mr. Karapurkar enlightened the students further on the government schemes for loans, financial aid and technical assistance to small scale industries.

Mr. Atul, shared his personal experiences as an entrepreneur of a unit that manufactures Generators. He briefly described the management of his establishment, and its remarkable achievements. He also shared the trials and tribulations he encountered throughout the process of setting up the company. He advocated private firms for loan facilities over government schemes, for their assurance, as compared to government facilities.

National Conference on Spiritual Empowerment of Judiciary

A National Conference of Judges of High Courts on 'Spiritual Empowerment of Judiciary' was recently held at Mount Abu in Rajasthan. The Conference called for strengthening the value system in the Indian culture which, the participants felt, was protecting the structure of justice and could promote spirituality and selfless service. "It is the need of the day to introduce value-based education in the legal system and in law colleges. We must create men and women of character based on the values and integrity," Justice A.R. Lakshmanan, Judge of the Supreme Court, said while inaugurating the Conference. A call was made to the jurists to work together to achieve the noble objectives of jurisprudence and 'spiritual prudence' by promoting the culture of peace, justice and harmony. Judges must devote some time daily on introspection, meditation, silence and study for their spiritual and moral development, it was stated.

Justice Lakshmanan lamented that moral values and professional ethics had suffered with the legal profession appearing to allow aggressive materialism to overtake itself. "The Bar and the Bench have to act collectively to retrieve the profession's image by taking stringent steps against malpractices and their practitioners", he emphasised. "Unless the justice delivery system functions smoothly and effectively and maintains balance between love and law, it will lose its vibrancy," Justice Lakshmanan stated, while pointing out that the judicial system must respond to the hopes and aspirations of people who had re-posed confidence on judiciary. He added that the progress of society depended upon proper application of law to the needy so as to achieve the constitutional goals of justice, liberty, equality, peace, purity and happiness.

Calling upon the judicial fraternity to endeavour at all stages to render 'positive and substantial' justice to all, especially to the poor and under-privileged sections, Justice Lakshmanan underlined the need for judges to share the social, economic and political philosophy that formed vital parts and background of the Constitution and determined its thrust and strategy of action.

News from Agricultural Universities

National Seminar on Organic Products and their Future Prospects

The Sher-e-Kashmir, University of Agricultural Sciences & Technology of Kashmir organized a National Seminar on 'Organic Products and their Future Prospects' recently. It was inaugurated by Lt. Gen. (Retd.) Shri. S.K. Sinha, (PVSM), His Excellency the Governor of J&K State, and attended by more than 100 delegates representing ICAR and its institutes, SAU's, APEDA, NHB and scientists from SKUAST of Kashmir and Jammu. The State Government and APEDA provided funds for the Seminar. The broad theme areas of the Seminar comprised four technical sessions including status of organic farming in India and the world, standardization of organic production, processing, marketing, value addition and future strategies for optimization of organic farming as a holistic production management system for minimizing pollution of air, soil and water together with ensuring health and productivity of independent communities of life, plants, animals and people. The Seminar formulated the concrete recommendations that emphasized the need for finding alternatives to synthetic inputs and focused attention of all stake holders on certified organic production. The Seminar recognized the fact that India still has a long way to go in developing the necessary policy framework production and marketing of organic products. It was reiterated that organic farming need to be practiced in identified zones, without compromising the country's self-reliance on food and fodder. Growing environmental consciousness and fears of health hazards of conventional food having spawned the consumption of organic food. The Seminar recommended the strategy for securing a place in national and international markets for organic value added products. Export promotion was emphasized only when a national certification system in consonance with the guidelines of codex Alimentarius Commission of FOA; accreditation and organized marketing within and outside the country are put in place by identified agencies of the government.

Training for Self Employment

A two-months Training Programme on Entrepreneurship was organized recently by the Agri-clinic and Agri-business Centre Cell of the Department of Business Management of CCS Haryana Agricultural University, Hissar. As many as 26 graduates have been equipped to undertake self-employment during the Programme. The objective of the training programme was to improve the entrepreneurship ability of the students to start their own agri-clinic and agri-business outlets. While addressing the participants, the Vice Chancellor, Mr. Miglani said that to achieve sustainability in the agriculture, there was need to change the mind set of the farmers as majority of them were still clung to the traditional farming practices. He said that in the modern age of mechanization it was essential that farmers at the grass root level may shift to commercial farming and start thinking in terms of agri-business. The Vice Chancellor deplored that due to their ignorance the farmers have not realised the importance and utility of modern farm management practices. Likewise, due to their Indian sense of hospitality and courtesy, they hardly care for the pilferages and wastage, during the process of harvesting and marketing and storage. The Vice Chancellor appealed the scientists and the participants to disseminate the newly generated technologies to the grass root level and thereby help in transforming the prevailing agricultural and rural scenario. Besides adoption of modern farming management practices, he said, due exposure was needed to be given towards marketing of farm produce. He said that the farmers need to be acquainted that instead of selling their produce in bulk in mandis, the horticultural and floriculture produce were to be sold on grading and packages basis. To help the participants in setting up their private ventures, the Vice Chancellor assured them that he would write to the NABARD Bank authorities to lower the interest rate.

According to Dr. J.P. Singh, Professor and Head of the Department and Director of the Programme, the participants were exposed to the different core areas of management and entrepreneurship development viz. agri-business management, agricultural marketing management, financial management, project management, small business management and information technology. He said that the subject masters and specialists from the varsity and outstation acquainted the participants through lectures and audio-visual aids with the latest developments and the current scenario.

Commonwealth Universities Yearbook

The Association of Commonwealth Universities recently released the 2003-04 edition of its Yearbook. The Yearbook is one of ACU's core activities. In addition to the well established staff lists which include research interests at departmental level, university profiles offer wide ranging information and general facilities, student numbers, admissions procedures, first and higher degrees and academic awards. Separately, national degree guides highlight the degree opportunities available in many countries and identify the levels — first, master's or research at which the studies are offered. The components of ACU Yearbook are:

University profiles

Facts and figures cover:

- Foundation date
- History and location
- Library holdings
- Academic year: term/semester date
- Statistics: staff/student figures
- Recurrent income levels

Courses and enrolment

Detailed entries help to find opportunities at home and overseas:

- Entry to first degree courses: application
- Procedures and basic education requirements
- First and higher degrees: titles, course lengths and general admission requirements
- Language of instruction
- Academic awards: scholarships, bursaries, etc.

Study options

Specially compiled national guides identify degree options in most countries including Australia, Bangladesh, Canada, Ghana, Hong Kong, India, Kenya, Malaysia, New Zealand, Nigeria, Pakistan, South Africa, Sri Lanka and the United Kingdom. The guides focus on broad subject areas and indicate which universities offer facilities for study and/or research at undergraduate, postgraduate and doctoral level.

Higher education systems

Short introductions to higher education systems set the scene in the larger countries, and normally cover the university system, academic year, language of instruction, pre-university education, admission to first degree courses, method of application, university finance, student finance, staff and student numbers. In countries where there are multiple universities, maps pinpoint the location of institutions.

Key academics and managers

The extensive list of key academics and managers which form the core of each university's entry. Full entries include:

- Executive head and other senior management offers listed by name in order of seniority;
- Deans and Secretaries of faculties/schools;
- Heads of Departments;
- Alphabetical listing by department of all senior teaching and research staff;
- Directors of research and other centers;
- Administrative contact officers;
- Heads of campuses/constituent colleges,
- Degree qualifications with awarding institutions for all staff;
- Phone/fax numbers and e-mail addresses for faculties, departments, special centers and, separately, for service managers.

Research strengths

Summaries of the general areas of research currently undertaken by academic units and special centers complement the detail ed staff lists and provide an overview of each academic section's work. The many and wide-ranging interests are all traceable through the extensive index system which extends to over 35,000 entries.

Central services

Up to 47 areas of special organizational responsibility are identified in most institutions and the contact officer named. Included are: alumni, careers, computing services, conferences/corporate hospitality, credit transfer, distance education, estates and buildings, finance, industrial liaison, language training for international students, marketing, public relations, quality assurance and accreditation, sport and recreation, strategic planning, student welfare etc.

Affiliated colleges in Asia

In Bangladesh, India and Pakistan, where teaching often takes place in colleges affiliated to a university, the colleges are listed alphabetically by location.

Indexes

Four substantial indexes containing -

- 2,500 university institutions, their constituent colleges and selected centers, and the location of affiliated colleges;
- subjects of study offered by the 23,000 academic departments and sub-departments;
- 35,000 departmental research entries;
- 178,000 academic and managerial staff listed in the university chapters.

An electronic version of the yearbook will be released shortly. Named CUDOS - Commonwealth Universities Online Database Service - this will enable subscribers to search the huge range of data that underpins the printed book from their desktops. A free trial will be made available, details of which can be found at www.acu.ac.uk/cudos.

AIU News

Prof. K Mohandas–President AIU 2004

Prof. (Dr.) K Mohandas, Director, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram has taken over as the 79th President of the Association of Indian Universities on January1, 2004. He will be the President of AIU for the year 2004. A postgraduate in Anaesthesiology, Dr.Mohandas was Professor and Head of the Department of Anaesthesia for over a decade before being appointed as the Dean of the Institute in 1993. He took over as the Institute's Director in 1994.

During his directorship, the Institute started several innovative programmes and secured many achievements, significant among them being the first laboratories in India to be accredited to the International Standards Organization (ISO) for testing and evaluation of medical devices, winning the National Technology Award, successful commercialization of more than a dozen technologies, starting the first Masters Programme in Public Health as well as first post-doctoral courses in Radiology and Anaesthesiology establishing India's first Comprehensive Care Centres for epilepsy, acute coronary events and movement disorders, new innovations in Neurosurgery and Interventional Radiology, Post graduate training programmes in Blood Banking, Medical Records and Advanced Medical Imaging, and initiating national and international research projects in health care technology, public health, clinical medicine and basic sciences.

Dr. Mohandas has held many important positions including the Presidentship of the Research Society of Anaesthesiology and Clinical Pharmacology, Chairman of the Anaesthesia and Resuscitation Equipment Committee of the Bureau of Indian Standards, membership on the editorial boards of national and international professional journals, governing councils of science & technology institutions and the National Board of Examinations. He is currently the Vice Chair of the Association of Common Wealth Universities and Hon. Professor at the University of Minnesota, USA. Recognizing his professional, academic and research contributions to anaesthesiology, the Royal College of Anaesthetists of the United Kingdom recently conferred FRCA on him, the first Indian to receive the Honorary Fellowship.

The family of Association of Indian Universities welcomes him as its new President ❑

THESES OF THE MONTH

A list of doctoral theses accepted by Indian Universities (Notifications received in AIU during October-November, 2003)

AGRICULTURAL & VETERINARY SCIENCES

Agricultural Engineering

1 Dhingra, Devinder **Optimization of the drying process of garlic (Allium sativum L.).** Department of Agricultural Engineering, Punjab Agricultural University, Ludhiana

Agronomy

1 Bhalerao, Gajanan Ashru. **Productivity and economics of Legume-wheat cropping systems grown under different nutrient management.** (Dr D G Giri), Department of Agronomy, Dr Panjabrao Deshmukh Krishi Vidyapeeth, Akola

Entomology

1 Patil, Narendra Madhavrao **Bioefficacy, residues and safety of chlorphifos and chlorphyrifosmethyl on brinjal and okra.** (Dr M D Dethe), Department of Entomology, Mahatma Phule Krishi Vidyapeeth, Rahuri, Distt Ahmednagar

2. Satpute, Niraj Shriram. **Eco-toxicological studies on Earias vitella (Fabricius).** (Dr S D Deshmukh), Department of Agricultural Entomology, Dr Panjabrao Deshmukh Krishi Vidyapeeth, Akola

3 Sharn. Sunandita **Insecticide resistance in the diamondback moth, Plutella xylostella (L.) in Himachal Pradesh and its management.** (Dr A K Verma), Department of Entomology, Dr Yashwant Singh Parmar University of Horticulture and Forestry. Solan.

Forestry

1 Annapurna, D **Investigations on seed variability, germination and modern nursery practices for mass production of quality seedlings of Sandal (Santalum album L.).** (Dr T S Rathore), Department of Forestry, Forest Research Institute, Dehradun

2 Jha, Ramesh Kumar. **Genotype X site interaction of selected clones of poplar (Populus deltoias Bartr. Ex. Marsh.) in Bihar.** (Dr N B Singh and Dr M N Jha), Department of Forestry, Forest Research Institute, Dehradun

3 Kadam Singh **Evaluation of full sib progenies of selected clones of poplar (Populus deltoines Bartr.).** (Dr N B Singh and Dr R C Thapliyal), Department of Forestry, Forest Research Institute, Dehradun.

4 Kulshrestha, Son Prakash. **Expert systems for timber identification and classification.** (Dr Sangeeta Gupta), Department of Forestry, Forest Research Institute, Dehradun.

5 Mathur, Ruchi **Physiological and biochemical responses of some promising clones of Dalbergia sisoo Roxb. to varying water stress conditions.** (Dr S Nautiyal), Department of Forestry, Forest Research Institute, Dehradun

6. Ramesh, K **An ecological study on the pheasants of Great Himalayan National Park, Western Himalaya.** (Dr G S Rawat), Department of Forestry, Forest Research Institute, Dehradun.

7 Shivanna, H **Role of shelter belts in low rainfall agroforestry system of Northern Karnataka.** (Dr T C Pokhriyal), Department of Forestry, Forest Research Institute, Dehradun.

8. Singh, Karan Pal **Bionomics of geometrid defoliator Ascotis imparata Walker (Syn. Ascoctis Selenaria Imparata Walker) and its management.** (Dr H R Khan), Department of Forestry, Forest Research Institute, Dehradun

9 Sunil Kumar. **Studies on the woody species diversity in Kail Ganga Watershed, Garhwal Himalaya using remote sensing and geographical information systems.** (Dr A K Tiwari), Department of Forestry, Forest Research Institute, Dehradun

Plant Pathology

1 Brahmankar, Shrikant Balasaheb **Investigation into the status, causes and management of betel vine (Piper betle L.) Wilt/foot rot in Vidarbha.** (Dr M N Asalmol), Department of Plant Pathology, Dr Panjabrao Deshmukh Krishi Vidyapeeth, Akola

2 Deshmukh, Ganesh Pandurang **Studies on strains of mosaic virus disease in some commercial varieties of sorghum and sugarcane.** (Dr D M Sawant), Department of Plant Pathology, Mahatma Phule Krishi Vidyapeeth, Rahuri, Distt Ahmednagar

Soil Science

1 Jadhao, Satischandra Maroti **Assessment of Saline-sodic Swell-Shrink Soil during reclamation process.** (Dr A S Patil), Department of Soil Science, Mahatma Phule Krishi Vidyapeeth, Rahuri, Distt Ahmednagar

Veterinary Science

1 Amandeep Kaur **Studies on combination of midazolam with ketamine and thiopentone anaesthesia in bovines.** Department of Veterinary Science, Punjab Agricultural Unviersity, Ludhiana

BIOLOGICAL SCIENCES

Biotechnology

1 Manjunath, B K **Studies on the floristic composition of Davangere Disrtrict, Karnataka.** (Dr V Krishna), Department of Biotechnology, Kuvempu University, Shimoga

2 Pandey, Gaurav **Kinetic studies for overproduction of Recombinant Interferon-Gamma (IFN-Y) in E.coli and methylotropic yeast.** (Dr K J Mukherjee), Centre for Biotechnology, Jawaharlal Nehru University, New Delhi

3 Shrivastava, Suchi **Bioprospecting potent plant compounds targetted to inhibit cell wall synthesis and DNA replication in mycobacterium smegmatis.** (Dr Anil Kumar and Dr Shusheel Kumar), Department of Biotechnology, Devi Ahilya Vishwavidyalaya, Indore

Botany

1. Badugu, Krishna Veni **Genetical and combining ability studies for yield components and key quality traites in aromatic rice (Oryza sativa L.).** (Dr N Shobha Rani), Department of Botany, Osmania University, Hyderabad.

2. Gupta, Ashish **Plant growth regulators and orchid regeneration: A study in vitro.** (Prof S P Vij), Department of Botany, Panjab University, Chandigarh

3. Rana, Sanjay. **Studies on the resistance of Camellia sinensis (L.)O. Kuntze to Corticium Theae Bernard causing black rot disease.** (Prof B N Chakraborty), Department of Botany, University of North Bengal, Raja Rammohunpur, Distt Darjeeling.

4 Saikia, Poonam. **Effects of acid stress on the normal and regenerating skin of catfish Heteropneustes fossilis *(Bloch, 1792): A histochemical investigation.*** (Dr A K Rai), Department of Botany, Dibrugarh University, Dibrugarh.

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Cellular & Molecular Biology

1. Acharya, Priyamvada. **Engineering bacillus subtilis lipase for Thermostability.** (Dr N Madhusudhana Rao), Centre for Cellular and Molecular Biology, Jawaharlal Nehru University, New Delhi.

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1 Sukumaran, Bindu **Functional characterisation of open reading frame F from the LDI locus of Leishmania Donovani.** (Prof R Madhubala), School of Life Sciences, Jawaharlal Nehru University, New Delhi

Microbiology

1 Radha Devi **Structural and functional studies on mycobactarium tuberculosis alkyl-hyudroperoxidase C (AhpC).** (Dr Girish Sahni), Institute of Microbial Technology, Jawaharlal Nehru University, New Delhi.

2 Vats, Purav **Studies on myo-inositolhexakisphosphate degrading enzyme from a hyperproducing strain of Aspergillus niger van Teighem.** (Dr D K Sahoo), Institute of Microbial Technology, Jawaharlal Nehru University, New Delhi

Zoology

1 Chaudhari, Vasudha **Studies on avian diversity of Jammu District of J&K State.** (Dr D N Sahi), Department of Zoology, University of Jammu, Jammu.

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1. Arun, A U **Biology, experimental culture and toxicity studies of villorita cyprinoides (Gray) in Cochin Estuary.** (Dr K Y Mohammed Salih), Department of Marine Sciences, Cochin University of Science and Technology, Kochi

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1. Desai, Mintu Kumar. **Cloning and characterisation of a salt stress inducible gene encoding voltage dependent Anion Channel from Pennisetum Glaucum.** (Dr M K Reddy), International Centre for Genetics Engineering and Biotechnology, Jawaharlal Nehru Unviersity, New Delhi

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For further details please contact, Dr. S.S. Wadje, the organizing Secretary of National conference, Department of Botany, Yeshwant Mahavidyalaya, V.I.P. Road, Nanded-431602.(M.S.) or E-mail - natconf04@yahoo.com

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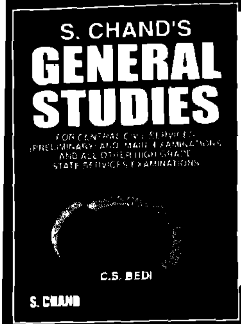

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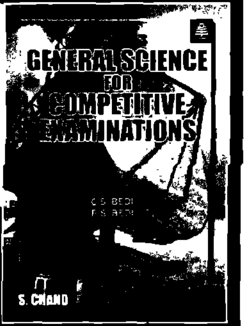

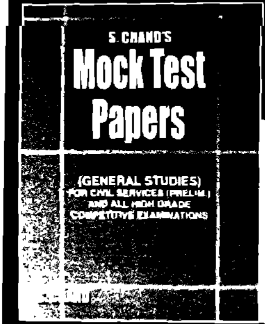
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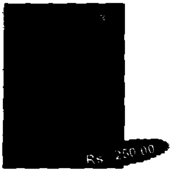

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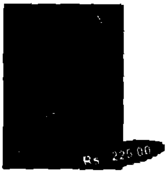

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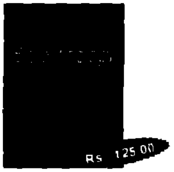

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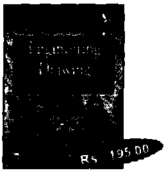

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